



Addendum to the Response Action Work Plan Former Stimson Central Maintenance Building Removal Plan 875 Highway 2 South

1.0 Introduction

This removal work plan is an addendum to the Response Action Work Plan (RAWP) (CDM 2003) and details specific information regarding removal activities that will take place at the Former Stimson Lumber Central Maintenance building, 875 Highway 2 South.

This plan includes building characterization data for the identification of vermiculite containing insulation (VCI), vermiculite containing building materials (VCBM), vermiculite containing soil (VCS), and evidence of Libby Amphibole (LA) asbestos in dust. Specific work to be performed on this property is also detailed on the following Contract Drawings:

- Former Stimson Central Maintenance Building Overall Site Layout - Figure 1
- Former Stimson Central Maintenance Building Interior Removal Plan - Figure 2
- Former Stimson Central Maintenance Building Exterior Removal Plan - Figure 3
- Former Mobile Shop Wall Details - Figure 4

All work on this property will be performed in accordance with the Contract Documents. All project quality assurance and quality control requirements for measurement reports will be addressed in a future data summary report.

2.0 Property Background

The following information was obtained from sampling activities and inspections performed by CDM at this property.

INTERIOR:

Overall Building Layout

- The Central Maintenance building is a rectangular, flat-roofed building, approximately 420 feet long and 142 feet wide.
- The entire building is constructed of timber main supports and wood framing. The ceiling and walls are finished with tongue and groove boards. The floor of the building is concrete slab on grade, containing several concrete vaults and pits. The roof has a 4-inch layer of aerated concrete on the tongue and groove ceiling covered by felt paper and tar.

- Walls throughout the building are constructed with 2-inch by 6-inch framing on 16-inch centers, and finished with 1-inch by 6-inch tongue and groove boards.
- The walls have equipment penetrating the wall cavities, and utilities running outside of the wall cavities.
- The building contains areas with varying wall heights. The building will be separated into four areas for identification relevant to this work plan (refer to Figure 1 for locations):
 - Former Mobile Shop - a 45 foot tall structure, approximately 260 feet long and 54 feet wide, located on the north side of the building.
 - Former Engineering and Warehouse (E&W) Areas A and B - Two 15-foot tall structures, consisting of multiple spaces. A midline wall divides the two buildings along the east-west axis. The western portion of this area is currently occupied by a manufacturer of wood boilers called Seton Manufacturing. The location is shown on Figure 1.
 - Area A refers to the space north of the midline wall
 - Area B refers to the space south of the midline wall.
 - Former Lift Truck Barn Area - the western portion of the building, separated from the other two areas by walls. This area is currently occupied by the business MAL Resources.

The designated areas are described in more detail below:

Former Mobile Shop

- The interior of the Former Mobile Shop is open space.
- All four walls of the shop contain VCI. However, the west wall is open from the ground up to approximately 20 feet. The area west of this opening is a bare storage area, with a lower roof, and is not considered to be part of the wall structure of the Former Mobile Shop.
- Walls in the Former Mobile Shop are vertically separated by 8-inch by 8-inch main supports into thirty-two, 20-foot wide bays. The bays are split into horizontal sections with 6-inch by 6-inch firebreaks. The wall studs divide a section into fourteen cavities. Each of these cavities contain VCI. See Figure 4 of the Contract Drawings.
 - On the north wall, five of thirteen bays have 16-foot high (solid) doors; there are three wall sections above the doors which contain VCI. The remaining eight bays have four sections of wall containing VCI.
 - On the south wall, the bottom section is a 19 foot high solid wall, constructed with back-to-back layers of vertical 1-inch by 6-inch tongue and groove boards. These sections do not contain VCI. The remaining two sections along the entire wall above the solid wall sections contain VCI.

- The south side exterior wall of the Former Mobile Shop has a layer of metal siding covering the tongue and groove boards. No VCI was observed within the space between the siding and the boards.
- There are two doors on the lower section of the east wall. The bay between the two doors is covered with plywood and contains fiberglass insulation in the wall cavity. The plywood is in poor condition, and the fiberglass insulation is not well contained. VCI remnants may also be present in this area of the wall.
- The upper two sections of the east wall contain VCI. The sections, combined, are about 20 feet high, and are accessible from a catwalk. A 35-ton crane and a 15-ton crane are near this wall. Two steel (2 inch diameter) cross braces across the ceiling also exists on the east wall. The braces may obstruct access to the highest wall section of north and south bay 1. The cleanup/construction contractor shall leave the braces in place, at all extent possible. If the braces require removal in order to access all VCI, they will require replacement upon completion of remediation activities.
- The west side of the room has no wall up to a height of approximately 20 feet. There are three wall sections with VCI, one below and two above the catwalk. All areas are accessible; although, there are two steel (2 inch diameter) cross braces across the ceiling that obstruct access to the highest wall section of north and south bay 13. The cleanup/construction contractor shall leave the braces in place, at all extent possible. If the braces require removal in order to access all VCI, they will require replacement upon completion of remediation activities.
- VCI is located on interior surfaces throughout the Former Mobile Shop. VCI has leaked out of the walls and collected on the crane track and supports in the Former Mobile Shop, as well as onto shelves and other horizontal surfaces.
- Subsurface vaults are located throughout the Former Mobile Shop floor. A number of them contain VCI remnants within the vaults.
- A small cinder block building is attached to the exterior of the north wall, accessible from inside the Former Mobile Shop. No VCI was observed in this area.
- Dust samples were not collected within the Former Mobile Shop, due to the large quantity of visible VCI located throughout the shop area.

Former Engineering and Warehouse Area

- The Former E&W Areas A and B are divided by a midline wall. The wall is not continuous across the entire length of the building; there are doorways and openings that divide the wall into sections.
- Portions of the midline walls are finished with plywood instead of tongue and groove boards. The walls contain VCI or remnants of VCI. The walls are separated into horizontal sections with 6-inch by 6-inch beams as firebreaks.

- Penetrations and remodeling at the midline wall has caused VCI release on either side of the wall.
- VCI is located on interior surfaces throughout the Former E&W Area A, including shelf units and other horizontal surfaces.
- VCI in the Former E&W Area B is limited to small quantities against the wall that have leaked from penetrations and remodeling.
- Seton Manufacturing currently occupies rooms 13-1, 16-1, 18-1, 10-3, 11-3, 12-1, and 12-5. They also use room 8-3 which is a bathroom. They have access to rooms 17-2 and 17-3, but do not use these spaces.
- Prior to using the facility, the area currently occupied by Seton Manufacturing (formerly Rohar Industries) was cleaned. The floors were swept, power washed, and the lower few feet of the walls were power washed. In addition, Murphy's soap was used on the walls of the offices and bathroom (rooms 8-3, 10-3, 11-3 and 12-5). During inspections conducted after cleaning, no VCI was observed in the Seton Manufacturing area. Therefore, interior cleaning will not be required in this area; however, spot cleaning, as defined in Section 4.2, may be required in areas adjacent to the wall where VCI has since leaked from the midline wall.
- VCI was not observed on the second floor balcony in this area.
- A total of 24 dust samples were collected from the various rooms of the Former E&W Areas A and B to determine where interior cleaning is required. Analytical results reveal that all dust samples are below the level requiring interior cleaning as directed by EPA. However, many rooms may require spot cleaning, as defined in Section 4.2.

Former Lift Truck Barn

- This area includes room 19-1.
- VCI was not observed in this area of the building.
- The Former Lift Truck Barn, Room 19-1, is occupied by MAL Resources, for the purpose of washing and stacking decorative stone. One wall of room 17-2 is adjacent to the Former Lift Truck Barn.
- One dust sample was collected from the Former Lift Truck Barn area. Analytical results reveal LA asbestos was non-detect.

EXTERIOR:

Roof

- Building roofing material on the Former Mobile Shop is composed of an approximate 4-inch layer of aerated concrete atop the tongue and groove ceiling of the building. On top of the concrete is a layer of tar, followed by a layer of tar paper.

- The roof of the Former Mobile Shop has significant damage; the tar paper has been removed or damaged on about 30% of the roof, confined mostly to the south and east areas of the roof. This area has been covered with a tarp (see Figure 3). Inspection of the roof under the tarp revealed that most of the aerated concrete is intact, with the exception of about one-third of the material which is severely degraded and wet. The damaged material is concentrated in the south side of the repaired area.
- The eastern quarter of the Former Mobile Shop roof is covered with corrugated metal siding. There is no indication of the condition of the aerated concrete under the siding.
- Friable concrete debris is scattered around this area of the roof and on the tar paper torn from the roof.
- Three bulk samples were collected of the aerated concrete roofing material of the Former Mobile Shop. Analytical results for all three samples reveal less than 1 percent LA asbestos.
- The roof of the Former E&W Area A is also made of the same VCBM.
- Pallets along the wall of the Former Mobile Shop and adjacent to the Former E&W Area A roof have been contaminated with VCBM debris.
- The roof of the Former E&W Area B and the raised E&W area roof do not contain aerated concrete VCBM.
- The entire roof of the Former E&W Area (lower roof) is undamaged and in good condition.
- VCI and VCBM debris is present on all roof areas, with the exception of the Former Lift Truck Barn roof.
- All areas of the roof can be accessed by ladders. Locations are shown on Figure 3.

Vaults

- There are two subsurface features along the exterior east side of the building: a vault under a surface-level hatch located on the south east corner, and a vault under a wooden shack on the far east corner of the north side.
 - The shack is constructed of a single wall of 1-inch by 6-inch tongue and groove boards, and is in very poor condition. The shack is a 5-feet by 4-feet structure with an open bottom, resting on a concrete vault approximately 8 feet deep. Piping in the vault is covered in part with damaged suspect asbestos containing material (ACM) pipe insulation. VCI is scattered throughout the vault, which has leaked from the Former Mobile Shop walls.
 - The vault located at the south end of the east side of the building is constructed with a soil floor and creosote-treated railroad tie walls. Vermiculite was observed in the soil floor of this vault.

- One soil sample was collected from the floor of the southeast vault. Analytical results reveal that LA asbestos was non-detect.

Perimeter Soil

- VCBM debris is scattered on the surface soils along the north and east sides of the building. The source is the damaged roof of the Former Mobile Shop. The debris is scattered on the ground along a 30 foot perimeter of the east and north sides of the building.
- VCI has also leaked from the Former Mobile Shop north wall and was observed in piles against the exterior north wall of the building.
- The soils located around the footprint of the building do not contain visible vermiculite, except in the southeast vault as previously discussed.
- Three soil samples were collected from the north and east perimeter of the building. Analytical results were non-detect for LA asbestos.

3.0 Health and Safety

- All removal activities at the Former Stimson Lumber Central Maintenance Building must be performed in accordance with the Libby Comprehensive Health and Safety Plan (CHASP), regulations set forth by the U.S. Occupational Safety and Health Administration's (OSHA) Title 29 Code of Federal Regulations (CFR) Parts 1926.
- All removal activities will be performed in Level C PPE as defined in the CHASP. Respiratory protection for removal activities will require use of Powered Air Purifying Respirators (PAPR's) equipped with P-100 HEPA cartridges.
- The cleanup/construction contractor shall submit a Health and Safety Plan for approval by the Government representative, prior to the start of work. Included in this Health and Safety Plan shall be written procedures for the following three specific items:
 - Electrical Safety and LOTO procedures must be implemented by a Certified Electrician.
 - Fall Protection.
 - Power Industrial Lift Truck Operations.
- Containment areas will be constructed to segregate removal areas from the existing businesses that will be operating during removal activities. Containments must be designed according to OSHA's Class I containment specifications as listed in CFR 1926.1101, and must be constructed achieve the following requirements:
 - Negative air must be sufficient to change out the containment air volume at least 4 to 5 times per hour.
 - Negative air must be great enough to achieve a -0.02" H₂O pressure differential between containment and outside air.
 - Contamination must be pulled away from worker's breathing zone.

- Once the containment is constructed, a hazard analysis form will be completed by the Government representative to ensure compliance with all applicable Contract Documents. The Government representative will perform a smoke test in all areas of containment prior to start of work to ensure that the negative air system is sufficient to assure that asbestos fibers do not migrate to adjacent areas.
- The containment must be inspected by the cleanup/construction contractor's competent person at the beginning of each work shift to ensure the negative air system is operational and that the containment has not been breached or damaged in any manner. Any damage or breaches identified during the inspection must be repaired prior to start of work.
- Stationary air samples will be collected in both business work areas during removal operations to ensure that asbestos fiber migration is controlled. One air sample will be collected in the MAL Resources business area (19-1) during the VCI removal from the walls in room 17-2. Up to three stationary air samples will be collected in the Seton Manufacturing business area (13-1, 16-1, 18-1, 10-3, 11-3, 12-1, and 12-5) during VCI removal from the midline wall. All stationary air samples will be collected in accordance with the Contract Documents.

3.1 Coordination with Businesses

- Two businesses are currently located inside the Former Stimson Building, MAL Resources and Seton Manufacturing. See Figure 1 for locations.
- The businesses will remain operational during the removal activities, to the extent possible. The cleanup/construction contractor will coordinate with the owners to minimize the disturbance to the businesses during normal working hours.
- Electricity that is supplying the business owners will remain on during the remediation activities, so as to minimize disturbance to the business operation. There is no evidence of electrical wiring inside of the midline walls.
- The business owners will be briefed by the Site Health and Safety Officer (SHSO) on the removal activities, controlled areas, and health and safety requirements to be followed by all employees. The business owners will be responsible for informing their employees of these requirements.
- Additional air samples will be collected by CDM to ensure that asbestos fiber migration is prevented into the workers' areas, as discussed above.

MAL Resources

- MAL Resources currently occupies room 19-1, as shown on the Contract Drawings.
- The employees will be able to access their southwest single access door as well as their north large bay door during the duration of the remediation, except during VCI surficial vacuum of the soils along the perimeter of the building. This disturbance is minimal, and the cleanup/construction contractor shall coordinate with MAL Resources during the exterior activities to ensure that they will be able to transport their trucks in and out of the building, as necessary.

- The cleanup/construction contractor will also coordinate with MAL Resources when setting up containment around the western wall of room 17-2. This set-up will be done after business hours to minimize disturbance to the employees.

Seton Manufacturing

- Seton Manufacturing currently occupies rooms 13-1, 16-1, 18-1, 10-3, 11-3, 12-1, and 12-5. They also use room 8-3 which is a bathroom. They have access to rooms 17-2 and 17-3, but do not use these spaces.
- The cleanup/construction contractor will coordinate with Seton Manufacturing when setting up containment around the southern side of the midline wall. The owner has agreed to move any equipment located next to the walls that are in the way of containment.
- The containment set-up will be done after business hours to minimize disturbance to the employees.
- The employees will have access to all their exterior doors during the duration of the remediation.

3.2 Containment

Containment systems must be constructed prior to the start of work. The systems shall be set up as follows:

- A single negative pressure enclosure (NPE) will be constructed that encompasses the Former Mobile Shop and the midline wall.
 - All doors and openings within walls of the Former Mobile Shop, and the open west end will be covered with 6-mil polyethylene sheeting.
 - The south side of the midline wall will be contained as the southern perimeter of the NPE. A 6-mil polyethylene sheeting containment wall will be constructed approximately 10 feet south of the midline walls, which will be coordinated with Seton Manufacturing.
 - The building walls and ceilings will act as part of the negative enclosure and will not require coverage with 6-mil polyethylene sheeting.
 - HEPA filter equipped air handling units will be placed in locations and quantity that creates a NPE.
- An additional containment system will be set up encompassing the wall containing the VCI in Room 17-2. This containment will be constructed of 6-mil polyethylene sheeting extending approximately 10 feet west of this portion of the wall. The use of this area will be coordinated with MAL Resources, as to prevent disruption to their business.

4.0 Remediation Activities

Remediation activities must be carried out in a manner that ensures cleaned areas are not re-contaminated during work activities. To accomplish that goal, work will be performed in the following order:

Color Photo(s)

The following pages
contain color that does
not appear in the
scanned images.

To view the actual images, please
contact the Superfund Records
Center at (303) 312-6473.

- Exterior Roof Remediation
- VCI Bulk Removal/Spot Cleaning (to be performed simultaneously)
- Interior Cleaning/Interior Vault Remediation (to be performed simultaneously)
- Encapsulant Application
- Exterior Vault Remediation
- Soil Excavation

4.1 Exterior Roof Remediation

The following activities will take place on the roof of the building:

- The upper (Former Mobile Shop) roof will be surface vacuumed to remove VCBM debris. The cleanup/construction contractor may use mechanical means, as necessary, to loosen the dirt and debris, while implementing dust suppression.

- The damaged tar paper will be removed and properly disposed.

REMEDICATION OF ROOF TO BE DISCUSSED WITH JC. ALSO MAY NEED INSPECTION BY ROOFING CONTRACTOR




- Methods and How -to - proceed have not been determined

- Methods and How -to - proceed have not been determined



- The following roof areas will be surface vacuumed after the completion of the upper roof: entire lower (Former E&W Area) roof including the roof area west of the upper roof and the raised roof area that is approximately 10 feet higher than the lower roof area. See Figure 3 for locations. Mechanical means may be used in these areas as well. The only roof area not requiring vacuuming is the Former Lift Truck Barn roof.

- The pallets that line the edge of the Former Mobile Shop on the lower roof will be washed to remove all surficial material and returned to their original location.

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| <p>Lower roofs, facing west – these roofs are not damaged – the northern half has VCBM, southern half does not.</p> | <p>VCBM is seen as both debris and pulverized into powder, collecting at low points including around pipe penetrations (vents).</p> | <p>A row of pallets lines the edge of the lower roof adjacent to the Former Mobile Shop. These are to be washed and returned to their original location.</p> |

4.2 Interior Remediation

Once the roofs have been cleaned and repaired, removal of bulk VCI will take place inside the building, followed by interior cleaning and encapsulant application.

VCI Bulk Removal

- Prior to VCI removal, all large equipment items, including the two large cranes in the Former Mobile Shop, will be cleaned to remove all surficial VCI and left in place. All equipment will be covered with polysheeting during the remainder of interior remediation to protect it from being recontaminated.
- VCI will be removed from the following walls (see Figure 2 for locations):
 - All Former Mobile Shop walls
 - All midline walls
 - Eastern wall of room 1-1
 - Western wall of rooms 17-2 and 17-3

VCI will be removed using vacuum methods. Vacuum methods consist of using a HEPA equipped vacuum truck with a storage container in line.

- The fiberglass insulation in the east wall of the Former Mobile Shop (located in between the two bay doors) will be removed, as it is not well contained behind the plywood wall and may contain VCI remnants as well. The plywood wall will be removed and disposed of as contaminated material.

Former Mobile Shop

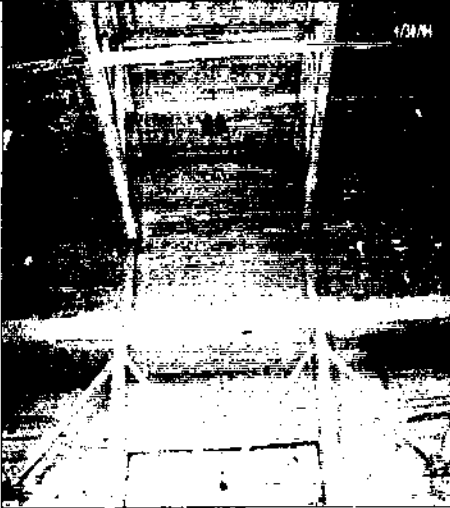
- In the Former Mobile Shop, A 6-inch diameter hole will be drilled into the tongue and groove boards in between each framing cavity to access the VCI (14 cavities per section per bay; 3 to 4 sections per bay). Adapters will be placed on the end of the vacuum hose to remove VCI from corners of the framing cavity.
- The majority of the Former Mobile Shop walls will be accessed using a man-lift with a retractable boom.
 - All bays on the north and south walls are accessible using the man-lift; this method was used successfully to access the bays during inspection.
 - Upper bays on the east and west wall can not be reached by the man-lift due to obstacles such as large cranes. These bays can be accessed from a catwalk on either side of the building.
 - The cleanup/construction contractor shall leave the 2-inch diameter steel bracing at the east and west ceiling in place, at the extent possible. Extra time may be required in order to access the wall sections that are located near the bracing. If removal of the bracing is required to access all VCI, the bracing will require replacement upon completion of remediation activities.
- The approximate quantity of VCI to be removed from the Former Mobile Shop area is 332 cubic yards.
- The approximate quantity of fiberglass insulation to be removed from the east wall of the Former Mobile Shop is 4 cubic yards.



North side bay 13, note obstacles to work area. The stairway accesses the catwalk on the west side of the Former Mobile Shop.



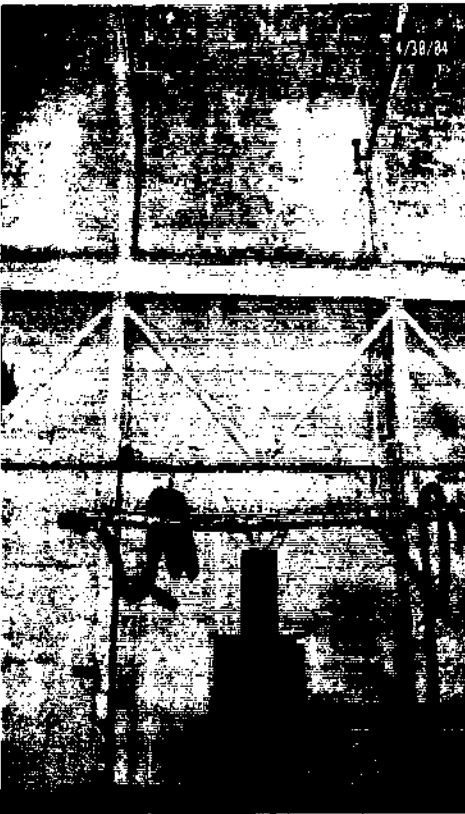
North side bays 11, 10, 9 from left to right. A door and solid wall are at lower section of bay 10, Wall cavities with VCI are in all of bays 9 and 11. Trusses for crane track in front of all wall bays.



Typical upper section of bays. Note steel beam and trusses along north and south side, this feature is for the 35 ton crane stationed on the east side of shop. VCI has settled onto many of the horizontal surfaces.



West wall of the Former Mobile Shop. The catwalk is located where the color changes from green to brown. Steel bracing is at the ceiling in northeast and southeast corners, but is not visible in this photo.




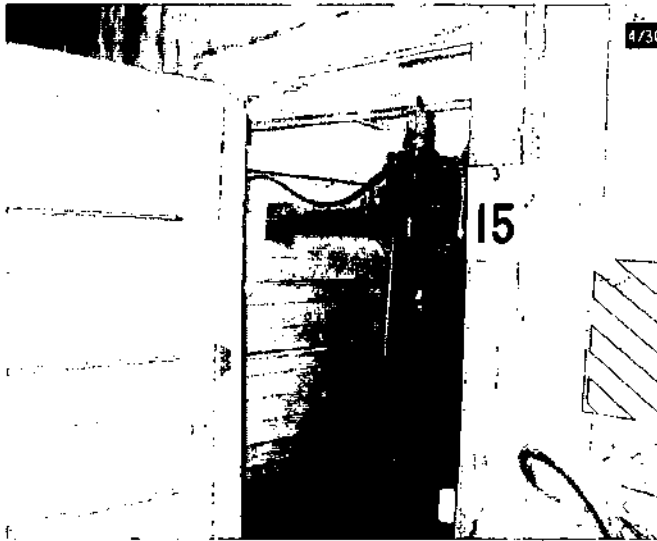
Typical south bays, photo shows bays 8 and 9. The lower 19ft. wall sections are solid in all south bays.



South side bay 12, showing some of the typical obstacles, penetrations, and utilities in the work areas.

Former E&W Areas

- VCI within the midline wall cavities, as well as rooms 1-1, 17-2 and 17-3, will be accessed using stepladders or platforms.
- The west wall of room 17-3 will be accessed and remediated through the west side of the wall, from MAL Resources.
- Holes will also be drilled in these walls to access the VCI.
- The approximate quantity of VCI to be removed from the Former E&W areas is 74 cubic yards.

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| <p>Room 1-1 (Fig 1). Midline wall. Walls in this room are accessible from a stepladder. These walls may contain full or remnant VCI.</p> | <p>Room 17-2. These walls have full or remnant VCI, and are in a small room with a fixed furnace.</p> |

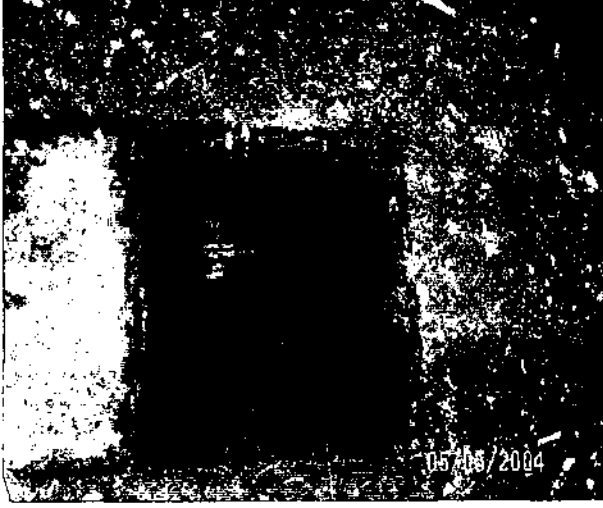
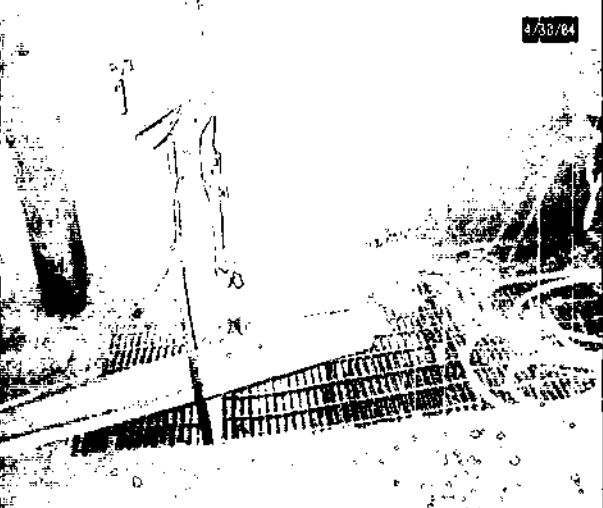
Spot Cleaning

- Spot cleaning will consist of HEPA vacuuming, mopping floors, and wiping down horizontal surfaces, etc. in areas containing visible VCI but not requiring a full interior cleaning of the entire room/area.
- Spot cleaning of VCI will be completed along the south side of the midline wall.
- Additional locations in Former E&W Areas A and B will require spot cleaning to remove remnant VCI that has leaked onto surfaces. These areas will be determined by visual observation, and approved by the onsite Government representative.

- Spot cleaning will be done in conjunction with bulk cleaning, in a manner that does not cause cross contamination between cleaned and contaminated surfaces.

Interior Cleaning

- Following bulk VCI removal, the entire Former Mobile shop will require interior cleaning, including the lower roof Former Mobile Shop area, due to the large quantity of visible VCI located throughout the interior surfaces of the shop. All floors will be HEPA vacuumed, and all horizontal surfaces will be wet-wiped.
- Since all dust samples collected within the building were below the levels requiring cleaning as directed by EPA, no additional rooms besides the Former Mobile Shop will require interior cleaning.
- During interior cleaning of the Former Mobile Shop, all interior vaults and pits will be opened and inspected. Vaults or pits containing water and/or sludge will not be cleaned. Any dry vaults or pits will be cleaned of debris, and vacuumed to remove VCI.
- Locations of a few vaults are included in Figure 2. The cleanup/construction contractor will also inspect additional vaults and pits that are discovered during work activities and are not included on the figure.

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| <p>Some vaults have water/sludge and do not require cleaning.</p> | <p>This pit is dry and has some debris, requires cleaning by disposing of debris and vacuuming pit. This is at the middle of east wall.</p> |

Encapsulant Application

- After the VCI has been removed and the work area inspected by an onsite Government representative for completeness of dust removal, encapsulant will be applied to all wall cavities that had contained VCI. Encapsulant will also be applied to exterior surfaces to ensure any remaining asbestos fibers are sealed in place. Encapsulant will not be directly applied to the Former Mobile Shop floor.


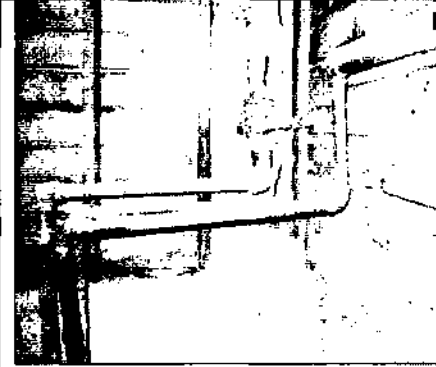
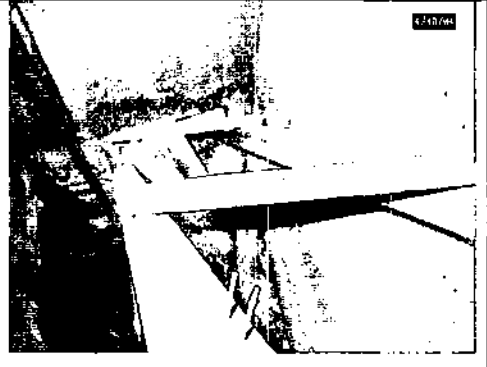
- Clear encapsulant material will be required in all areas requiring application of encapsulant.

4.3 Exterior Vault Cleaning and Soil Excavation

Once remediation activities are completed on the roof and inside the building, the remediation activities along the exterior perimeter of the building will commence. This will ensure cross-contamination does not occur. The following areas require remediation:

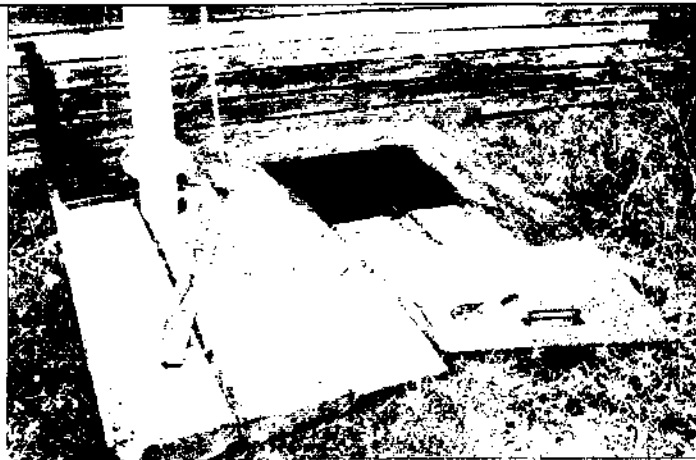
Shack and Northeast Vault

- The shack will be dismantled prior to entry to ensure the safety of workers.
 - The shack materials will be properly disposed of as ACM.
 - Piping inside the shack will be protected and supported, as necessary.
 - All suspect ACM insulation from the pipes will be removed and properly disposed.
- The vault located in the floor of the shack will then be remediated.
 - Any debris inside the vault will be discarded as ACM.
 - VCI within the vault will be removed with vacuum methods.
 - Encapsulant will then be applied to the walls, floor, and piping within the vault.

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| The shack is located on the east end of the north side of the Former Mobile Shop (refer to Fig 2), and has VCI inside and on the ground outside. Shack will be dismantled and discarded. | Inside the shack – piping with remains of suspect ACM insulation. The insulation will be discarded as ACM. | Looking into the vault – VCI is scattered throughout this area – discard all debris within this vault – wash down and surface vacuum interior, apply encapsulant. |

Southeast Vault

- The vault on the southeast corner of building has vermiculite in the soil floor. However, soil samples reveal that LA asbestos is non-detect. Therefore, no remediation will be required to the soil floor of the vault.
- Any remnant VCI located on the surface of the soil floor will be vacuumed.



Entrance to vault on the south east corner of the building. The Vault has creosote timber walls and a soil floor.



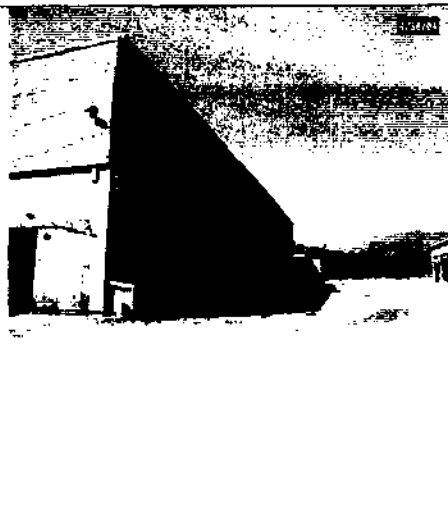
Floor of the vault as viewed from the entrance.

Exterior Soil

- Excavation along the perimeter of the building will not be required, as analytical results reveal that LA asbestos is non-detect.
- However, surficial VCBM and VCI located on the top of the soil along the north and east sides of the building will be removed by vacuum methods, from the edge of the walls and outward to 30 feet.
- Items located within the work area, such as the racks and shelving will be left in place and protected during surficial removal.



North side of Former Mobile Shop facing west, from the east end.



North side of Former Mobile Shop facing east, from the west end.



East side of Building, note the shed/shelves and pipe rack against the wall – the shed has no floor.

5.0 Restoration Activities

Restoration activities at this property will consist of performing the following work:

- Roof
 - Previously discussed in Section 4.1.
- Former Mobile Shop
 - Blown-in fiberglass will be installed in all exterior walls of the Former Mobile Shop, which includes the entire north and east walls, and the upper portion of the south and west walls.
 - All holes that were made in the walls to access the VCI will be repaired and sealed.
- Former E&W Areas A and B
 - Blown-in fiberglass will be installed in the eastern wall of room 1-1. The interior walls, including the midline wall and walls of rooms 17-2 and 17-3, will not be insulated.
 - All holes that were made in the walls to access the VCI will be repaired and sealed.
- Shack and northeast vault
 - The shack will not be re-built.
 - A cover will be constructed over the vault for safety purposes, constructed of plywood and a 2-inch by 4-inch frame to fix the plywood into place.

6.0 References

CDM. 2003. Response Action Work Plan (RAWP), EPA Libby Asbestos Project, Libby, Montana. November.

CHASP. Libby Comprehensive Health and Safety Plan, EPA Libby Asbestos Project, Libby, Montana. May 2003.

EXCAVATION QUANTITIES
Stimson Maintenance Building

Computed by: AR Date: 5/25/2004
Checked by: DS Date: 6/7/2004

LOCATION: - mobile shop

| location | Bay | Section | Area (SF) | Thickness (in.) | # of Bays | Volume (CY) |
|------------|--------------------------------|---------|-----------|-----------------|-----------|-------------|
| SOUTH WALL | Bay 1 | 1 | 380 | 0 | 1 | 0 |
| | | 2 | 110 | 6 | 1 | 2 |
| | | 3 | 150 | 6 | 1 | 3 |
| | Bays 2,3,4,5,6,8,9,10,11,12,13 | 1 | 390 | 0 | 11 | 0 |
| | | 2 | 220 | 6 | 11 | 45 |
| | | 3 | 300 | 6 | 11 | 61 |
| | Bay 7 | 1 | 380 | 0 | 1 | 0 |
| | | 2 | 220 | 6 | 1 | 4 |
| | | 3 | 150 | 6 | 1 | 3 |
| NORTH WALL | Bays 1,5,7,9,11,13 | 1 | 250 | 6 | 6 | 28 |
| | | 2 | 240 | 6 | 6 | 27 |
| | | 3 | 240 | 6 | 6 | 27 |
| | | 4 | 120 | 6 | 6 | 13 |
| | Bays 2,4,5,8,10,12 | 1 | 320 | 0 | 6 | 0 |
| | | 2 | 160 | 6 | 6 | 18 |
| | | 3 | 240 | 6 | 6 | 27 |
| | | 4 | 120 | 6 | 6 | 13 |
| | Bay 3 | 1 | 250 | 0 | 1 | 0 |
| | | 2 | 240 | 6 | 1 | 4 |
| | | 3 | 240 | 6 | 1 | 4 |
| | | 4 | 120 | 6 | 1 | 2 |

| | | | | | | |
|-----------|------------|--|------|---|--|----|
| EAST WALL | VCI | | 1408 | 6 | | 26 |
| | FIBERGLASS | | 224 | 6 | | 4 |
| WEST WALL | VCI | | 1350 | 6 | | 25 |

TOTAL VCI 332
TOTAL FIBERGLASS 4

LOCATION: - E&W AREAS

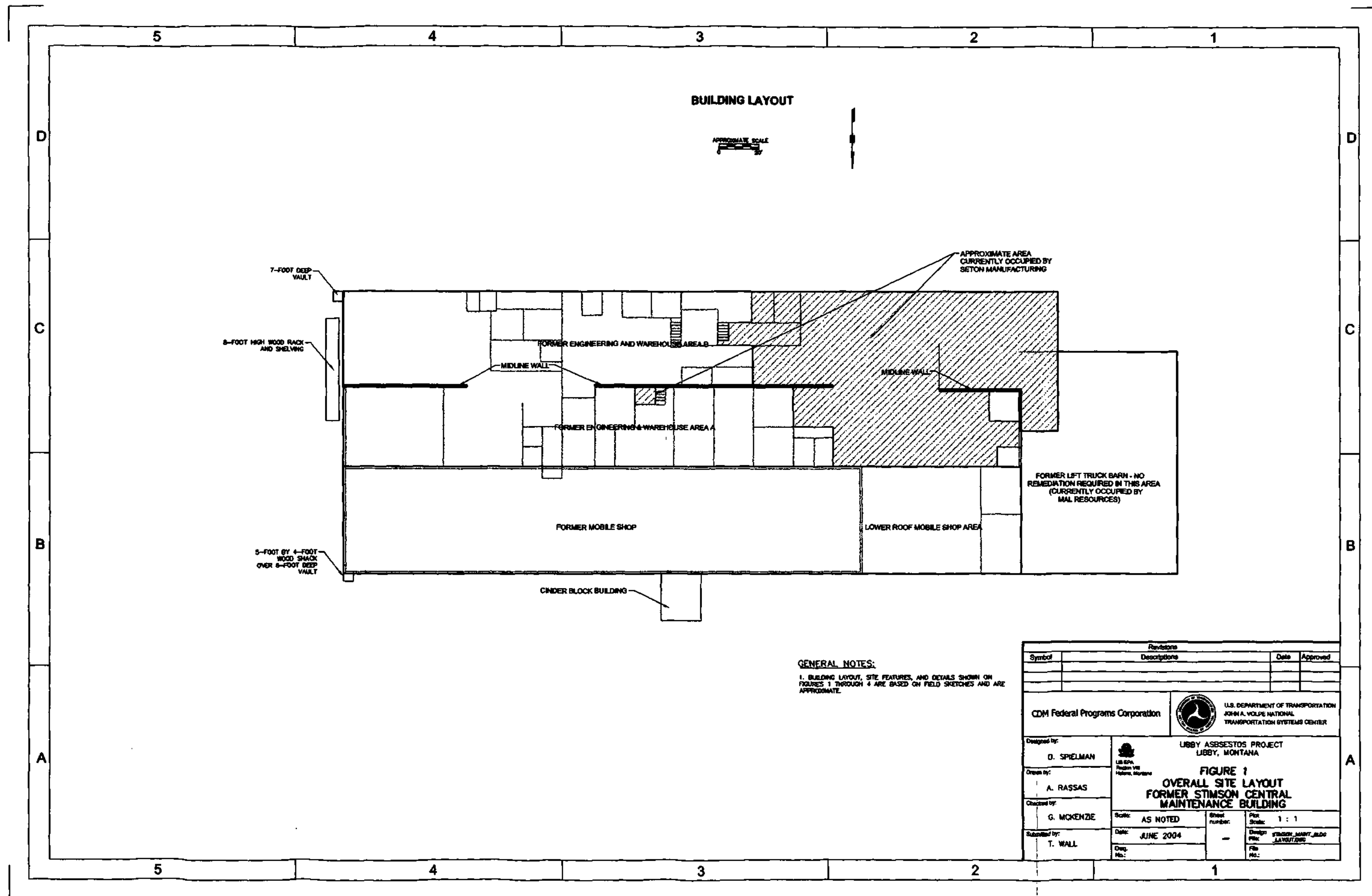
| location | LENGTH(FT) | HEIGHT (FT) | THICKNESS(IN) | Volume (CY) |
|---------------|------------|-------------|---------------|-------------|
| MIDLINE WALLS | 185 | 15 | 6 | 54 |
| ROOM 1-1 | 40 | 15 | 6 | 11 |
| ROOM 17-2 | 10 | 15 | 6 | 3 |
| ROOM 17-3 | 21 | 15 | 6 | 6 |

TOTAL E&W AREAS 74

| location | | Type | Rating (R/in) | Depth (in) |
|-------------|--|------------|---------------|------------|
| wall cavity | | VCI | 2.7 | |
| wall cavity | | Fiberglass | 3.2 | |

comparative Insulation R VALUE

See Contract Drawings for locations.



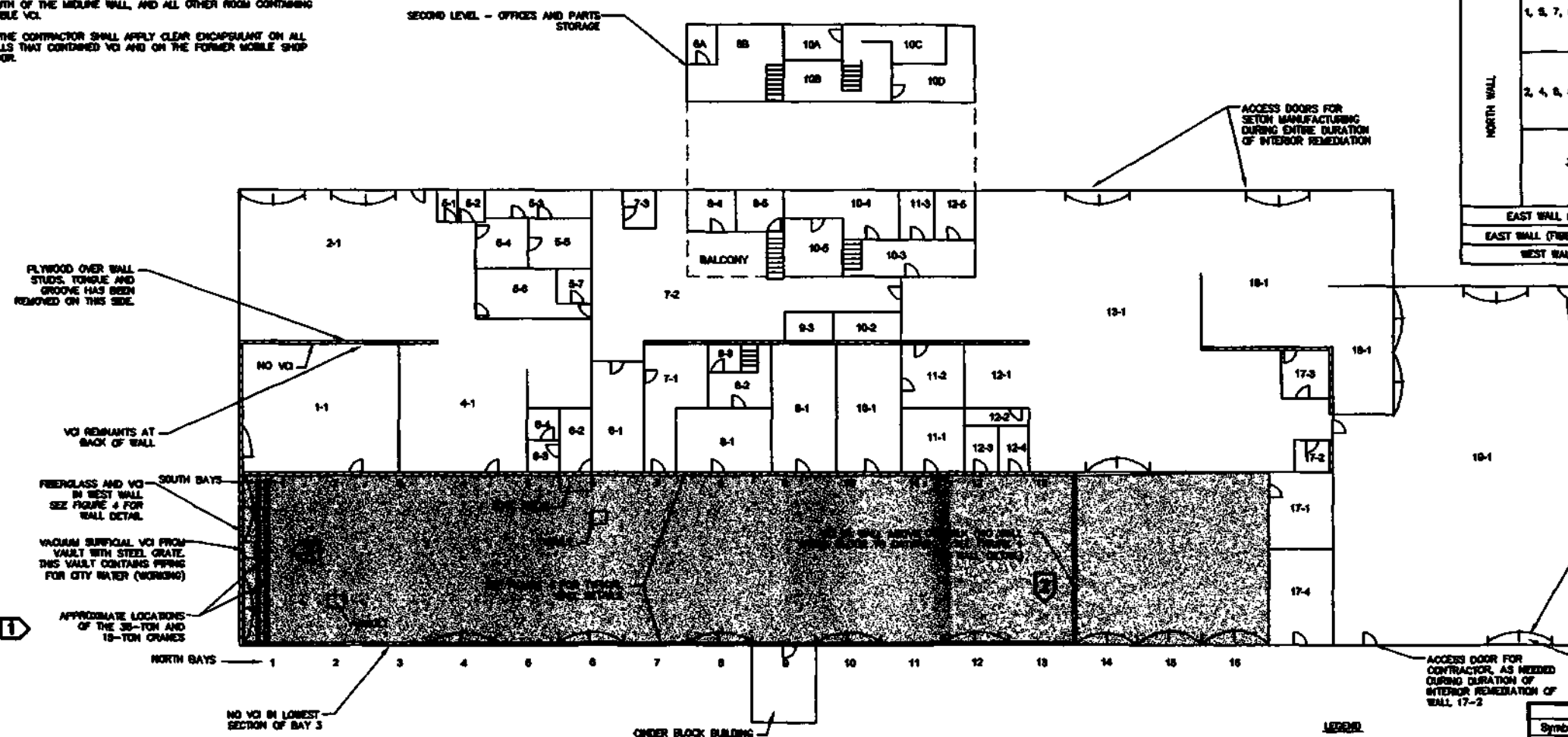
INTERIOR REMOVAL PLAN NOTES:

(SEE CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION)

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL HEALTH AND SAFETY REQUIREMENTS, IN ADDITION TO THOSE SPECIFIED IN THE RESPONSE ACTION WORK PLAN ADDENDUM.
2. ALL WORK SHALL BE PERFORMED IN THE SEQUENCE SPECIFIED IN THE RESPONSE ACTION WORK PLAN ADDENDUM.
3. REMOVE ALL INSULATION FROM THE WALLS OF THE FORMER MOBILE SHOP, MIDLINE WALLS, EAST WALL OF ROOM 1-1, WEST WALL OF ROOM 17-2, AND WEST WALL OF ROOM 17-3.
4. THE CONTRACTOR SHALL INSPECT ALL VAULTS FOR VOL AND SURFICIAL VACUUM VCI WITHIN VAULTS.
5. THE CONTRACTOR SHALL PERFORM INTERIOR CLEANING IN THE FORMER MOBILE SHOP.
6. THE CONTRACTOR SHALL PERFORM SPOT CLEANING IN THE AREAS SOUTH OF THE MIDLINE WALL, AND ALL OTHER ROOM CONTAINING VISIBLE VCI.
7. THE CONTRACTOR SHALL APPLY CLEAR ENCAPSULANT ON ALL WALLS THAT CONTAINED VCI AND ON THE FORMER MOBILE SHOP FLOOR.

INTERIOR REMOVAL PLAN

PLAN VIEW
APPROXIMATE SCALE
1" = 10'-0"



| VCI INSULATION QUANTITIES - MOBILE SHOP | | | | | | |
|---|-------------------------------------|---------|-----------|----------------|-----------|-------------|
| LOCATION | BAYS | SECTION | AREA (SF) | THICKNESS (IN) | # OF BAYS | VOLUME (CY) |
| SOUTH WALL | 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13 | 1 | 380 | 0 | - | - |
| | | 2 | 220 | 8 | 11 | 48 |
| | | 3 | 300 | 8 | 11 | 81 |
| | 1 | 1 | 380 | 0 | - | - |
| | | 2 | 110 | 8 | 1 | 2 |
| | | 3 | 120 | 8 | 1 | 3 |
| | 7 | 1 | 380 | 0 | - | - |
| | | 2 | 220 | 8 | 1 | 4 |
| | | 3 | 120 | 8 | 1 | 3 |
| | 1, 5, 7, 8, 11, 13 | 1 | 220 | 8 | 6 | 28 |
| | | 2 | 240 | 8 | 6 | 27 |
| | | 3 | 240 | 8 | 6 | 27 |
| NORTH WALL | 2, 4, 5, 6, 10, 12 | 1 | 120 | 8 | 6 | 13 |
| | | 2 | 160 | 8 | 6 | 18 |
| | | 3 | 240 | 8 | 6 | 28 |
| | 3 | 1 | 200 | 0 | - | - |
| | | 2 | 240 | 8 | 1 | 4 |
| | | 3 | 240 | 8 | 1 | 4 |
| | 4 | 1 | 120 | 8 | 1 | 2 |
| | | 2 | 140 | 8 | 1 | 2 |
| | | 3 | 120 | 8 | 1 | 2 |
| | EAST WALL (VCI) | NA | 1408 | 8 | NA | 27 |
| | | NA | 224 | 8 | NA | 4 |
| | | NA | 1350 | 8 | NA | 25 |

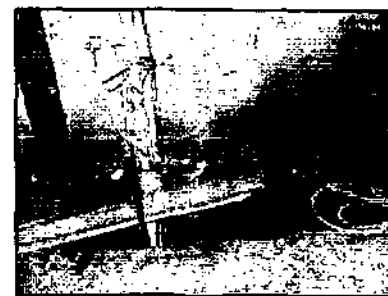
| VCI INSULATION QUANTITIES - ERM AREAS | | | | |
|---------------------------------------|-------------|-------------|----------------|-------------|
| LOCATION | LENGTH (LF) | HEIGHT (FT) | THICKNESS (IN) | VOLUME (CY) |
| MIDLINE WALLS | 195 | 15 | 8 | 54 |
| ROOM 1-1 | 40 | 15 | 8 | 11 |
| ROOM 17-2 | 10 | 15 | 8 | 3 |
| ROOM 17-3 | 21 | 15 | 8 | 6 |



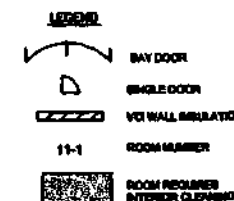
1 EXTERIOR - EAST SIDE OF BUILDING



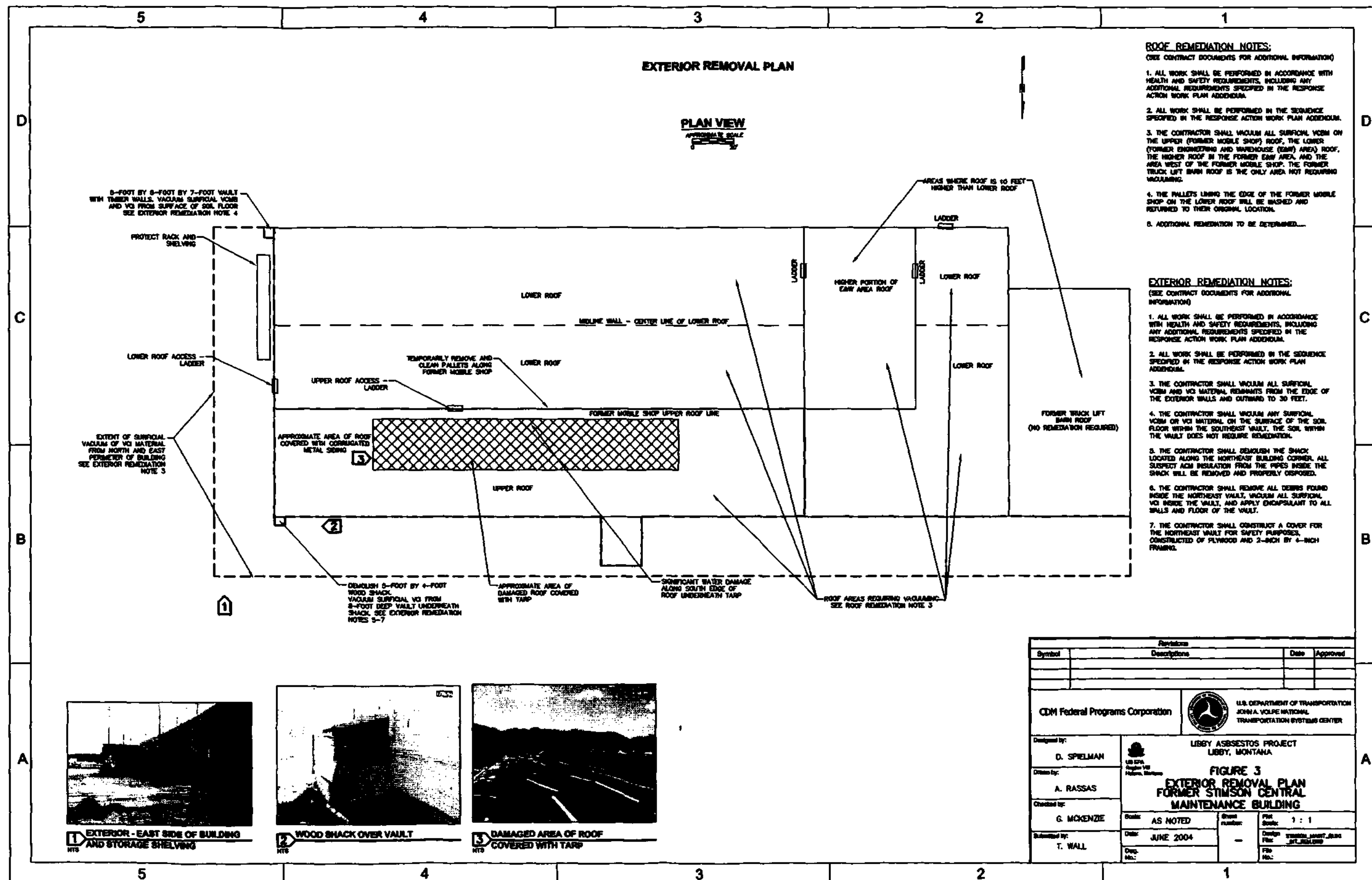
2 INTERIOR BUILDING WALL



3 STEEL GRATE OVER VAULT

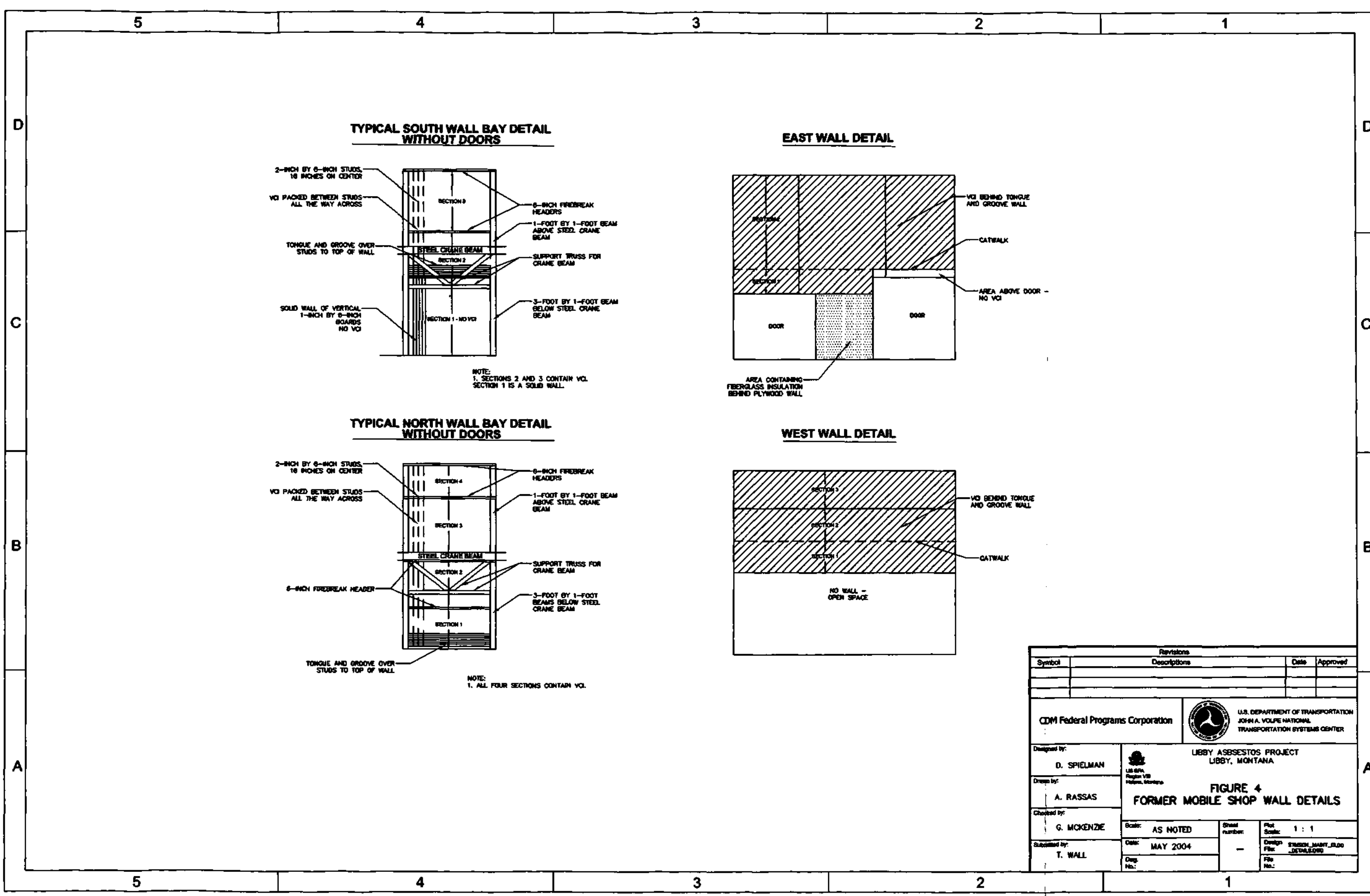





| Revisions | | Date | Approved |
|----------------------------------|-------------|---|--------------------------------------|
| Symbol | Description | | |
| | | | |
| | | | |
| CDM Federal Programs Corporation | | U.S. DEPARTMENT OF TRANSPORTATION JOHN A. VOULPE NATIONAL TRANSPORTATION SYSTEMS CENTER | |
| Designed by: | D. SPIELMAN | LIBBY ASBESTOS PROJECT LIBBY, MONTANA FIGURE 2 INTERIOR REMOVAL PLAN FORMER STIMSON CENTRAL MAINTENANCE BUILDING | |
| Drawn by: | A. RASSAS | | |
| Checked by: | G. MCKENZIE | | |
| Reviewed by: | T. WALL | | |
| Scale: | AS NOTED | Sheet number: | Plot Scale: 1 : 1 |
| Date: | JUNE 2004 | Design: | STIMSON_MAINT_BUILD_INTERIOR_REMOVAL |
| Drawn by: | | File: | |
| Drawn by: | | File: | |



| Revisions | | Date | Approved |
|-----------|--------------|------|----------|
| Symbol | Descriptions | | |
| | | | |
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|----------------------------------|-------------|---|---------------------------------|
| CDM Federal Programs Corporation | | U.S. DEPARTMENT OF TRANSPORTATION JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER | |
| Designed by: | D. SPIELMAN | LIBBY ASBESTOS PROJECT LIBBY, MONTANA FIGURE 3 EXTERIOR REMOVAL PLAN FORMER STIMSON CENTRAL MAINTENANCE BUILDING | |
| Drawn by: | A. RASSAS | | |
| Checked by: | G. MCKENZIE | | |
| Submitted by: | T. WALL | | |
| Scale: | AS NOTED | Sheet number: | 1 of 1 |
| Date: | JUNE 2004 | Design File: | STIMSON_MAINT_BUILD_APT_004.DWG |
| Drawn by: | | File No.: | |



| Revisions | | | |
|----------------------------------|--|--|--|
| Symbol | Descriptions | Date | Approved |
| | | | |
| | | | |
| CDM Federal Programs Corporation | |  U.S. DEPARTMENT OF TRANSPORTATION JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER | |
| Designed by: |  LIBBY ASBESTOS PROJECT LIBBY, MONTANA | | |
| D. SPIELMAN |  U.S. EPA Region VIII Helena, Montana | | |
| Drawn by: | FIGURE 4 FORMER MOBILE SHOP WALL DETAILS | | |
| A. RASSAS | FIGURE 4 FORMER MOBILE SHOP WALL DETAILS | | |
| Checked by: | Scale: AS NOTED | Sheet number: — | Plot Scale: 1 : 1 |
| G. MCKENZIE | Date: MAY 2004 | — | Design File: STUSSCH_JANNT_RL00 DETAILS00 |
| Submitted by: | Draw No.: — | | File No.: — |
| T. WALL | | | |